East Africa, has wing 78, culmen 48 mm. Specimens from this territory and from eastern Tanganyika have relatively small wing-measurements, see the figures in Clancey (1951) and Benson (1952), and have been called A. s. tephria by the former author. There appears to be no marked variation in wing-length in quadribrachys, comparing the figures given above with those in Bannerman (1933), the overall figures even for the western. nominate sub-species being 71-81 mm.

Benson (1960) suggests that quadribrachys and semitorauata could not co-exist, their ecological requirements being so similar, but this seems to be no longer acceptable. Except that semitorquata extends into southwestern Angola (Traylor, 1963), their case is analogous with examples of lower level gaps (as opposed to montane gaps) in distribution between western and eastern African representative forms given by Benson & Irwin (in press). In the case of western quadribrachys and eastern semitorquata, however, there is no gap, at least in north-western Northern Rhodesia, and even some overlap. Evidence of an overlap may also be forthcoming in due course from the Katanga. But they may nevertheless be regarded as forming a superspecies, in which atthis should also be included.

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Some further records from the North-Western Province of Northern Rhodesia

by C. W. BENSON and C. S. HOLLIDAY

On the tour referred to in the immediately preceding paper, specimens were also obtained in the same site on the Mwombezhi River, between 23rd and 29th October, of the following:— Pogoniulus bilineatus mfumbiri (Ogilvie-Grant), Trochocercus cyanomelas vivax Neave, Cossypha bocagei chapini Benson, Bradypterus cinnamomeus nyassae Shelley, Prinia 1. leucopogon (Cabanis) and Schoenicola brevirostris alexinae (Heuglin). A male in breeding condition of the last named was also obtained at Mt. Makulu, 15° 34′ S., 28° 16′ E., on 6th April.

At Ngalula, 13° 24′ S., 24° 51′ E., visited from 7th to 21st October,

specimens were obtained of the following:—

Accipiter m. melanoleucus Smith (\(\tau\), wing 327 mm.), Aquila (Hieraaetus) dubia (Smith), Pachycoccyx audeberti validus (Reichenow), Turdus olivaceus stormsi Hartlaub, Apalis cinerea alticola Shelley, Dicrurus I. ludwigii, (Smith), Malaconotus nigrifrons manningi Shelley, Nectarinia olivacea

lowei (Vincent), Ploceus bicolor kigomaensis (Grant & Praed) and Serinus c. capistratus (Finsch) (this last has also recently been obtained by D.

Bromfield at Kitwe).

M. P. Stuart Irwin has drawn our attention to two males and a female of Lagonosticta rubricata collected by C. W. B. at Salujinga, 10° 58′ S., 24° 07′ E., in March, 1963, in the National Museum, Bulawayo. Compared with other material therein, from elsewhere in the Rhodesias and Nyasaland, the brown of the upper side is much darker, and the crown greyer, less pink. The Salujinga specimens appear to be near L. r. congica Sharpe, while the remainder are L. r. haematocephala Neumann, though a male and female from Ntambu, 12° 27′ S., 24° 59′ E., are intermediate.

On birds new for New Guinea or with a larger range than previously known

by A. HOOGERWERF Received 28th December, 1963

From January, 1959 till mid-June, 1961, and from February till the middle of September, 1962 the author worked at the Experimental Rice Estate "Kumbe" at Kurik in south New Guinea, studying mammals and birds harmful to rice cultivation. The work was carried out by order of the

Director of the Agricultural Research Station at Manokwari.

Kurik's rice growing area covering some 750 acres, is situated about six miles north of the mouth of the Kumbe River and some 25 miles northwest of Merauke as the crow flies. This artificially irrigated flat area consists of two polders, known as the North (500 acres) and the South polder (250 acres). This whole cultivated area is inundated by water from an irrigation tank created by the partial impoldering of an extensive swamp, surrounded by thin *Eucalyptus* forest known as the Gali Ephata marsh. Though large parts of this swamp become dry during the East monsoon, this never or very rarely happens to the whole area and it is almost impossible that it will happen with the deeper impoldered part. Marsh and tank are mostly covered with low marsh and water plants with some trees and tree-groups scattered all over the area.

The surroundings of the Rice Estate consist almost exclusively of uninhabited savannahs, inundated for the greater part during the rainy season, dry or nearly dry during at least six months (June till November), except some lower enclaves holding water during all months. The desiccated savannahs covered with thin Eucalyptus-Melaleuca forests and "gempol" (Nauclea orientalis) on the more open places, which are covered with grass or a grasslike vegetation, are burnt down by the natives nearly every year, changing huge plains into black deserts and making the name fire-

savannah very appropriate.

During 1956 till 1961 there was an annual rainfall at Kurik of 1715, 1737, 1460, 1315, 1739 and 1381 mm., with maxima of 323 (February), 427 (December), 264 (March), 415 (February), 402 (March) and 390 mm. (January) and minima of 51 (August), 0 (September), 4 (August), 3 (October), 11 (September) and 4 mm. (August) respectively.

During 1960 and 1961 the lowest morning temperature (between 5 and 6 a.m.) registered in June till October, was 17-20° C. and the highest

temperature was recorded in November till May, viz. 27° C.